

May 15, 2023

Docket No.: 52-026

ND-23-0397
10 CFR 52.99(c)(1)

U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555-0001

Southern Nuclear Operating Company
Vogtle Electric Generating Plant Unit 4
ITAAC Closure Notification on Completion of 2.5.02.06a.i [Index Number 529]

Ladies and Gentlemen:

In accordance with 10 CFR 52.99(c)(1), the purpose of this letter is to notify the Nuclear Regulatory Commission (NRC) of the completion of Vogtle Electric Generating Plant (VEGP) Unit 4 Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) item 2.5.02.06a.i [Index Number 529] which verifies the reactor trip switchgear opens after the test signal reaches the specified limit. The closure process for this ITAAC is based on the guidance described in NEI 08-01, "Industry Guideline for the ITAAC Closure Process under 10 CFR Part 52," which was endorsed by the NRC in Regulatory Guide 1.215.

This letter contains no new NRC regulatory commitments. Southern Nuclear Operating Company (SNC) requests NRC staff confirmation of this determination and publication of the required notice in the Federal Register per 10 CFR 52.99.

If there are any questions, please contact Kelli Roberts at 706-848-6991.

Respectfully submitted,



Jamie M. Coleman
Regulatory Affairs Director Vogtle 3 & 4

Enclosure: Vogtle Electric Generating Plant (VEGP) Unit 4
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cc: Regional Administrator, Region II
 Director, Office of Nuclear Reactor Regulation (NRR)
 Director, Vogtle Project Office NRR
 Senior Resident Inspector – Vogtle 3 & 4

**Southern Nuclear Operating Company
ND-23-0397
Enclosure**

**Vogtle Electric Generating Plant (VEGP) Unit 4
Completion of ITAAC 2.5.02.06a.i [Index Number 529]**

ITAAC Statement

Design Commitment

6.a) The PMS initiates an automatic reactor trip, as identified in Table 2.5.2-2, when plant process signals reach specified limits.

Inspections/Tests/Analyses

An operational test of the as-built PMS will be performed using real or simulated test signals.

Acceptance Criteria

i) The reactor trip switchgear opens after the test signal reaches the specified limit. This only needs to be verified for one automatic reactor trip function.

ITAAC Determination Basis

Multiple ITAAC are performed to verify that the Protection and Safety Monitoring System (PMS) initiates an automatic reactor trip, as identified in the Combined License (COL) Appendix C Table 2.5.2-2 (Attachment A), when plant process signals reach specified limits. The subject ITAAC performs testing to confirm the reactor trip switchgear opens after the test signal reaches the specified limit.

Testing was performed in accordance with Unit 4 preoperational test procedure, as documented in SV4-PMS-ITR-800529, (Reference 1) to confirm that the reactor trip switchgear opens during an operational test of the as-built PMS using a real signal. When the real signal reached the specified limit the Reactor Trip Circuit Breakers (RTCBs) were verified to open. This test only needed to be verified for one automatic reactor trip function.

The RTCBs were placed in the closed position and one of the Passive Residual Heat Removal (PRHR) Heat Exchanger (HX) outlet Flow Control Valves (FCVs) was opened. This valve opening generated a PRHR Actuation Reactor Trip. Each RTCB was verified to be open locally at the Reactor Trip Switchgear Cabinet. The testing verified that each of the RTCBs receive a PMS reactor trip signal.

The completed Unit 4 preoperational test results documented in Reference 1 confirmed that the reactor trip switchgear opens after the test signal reaches the specified limit. This was only verified for one automatic reactor trip function.

Reference 1 is available for NRC inspection as part of ITAAC 2.5.02.06a.i Unit 4 Completion Package (Reference 2).

ITAAC Finding Review

In accordance with plant procedures for ITAAC completion, Southern Nuclear Operating Company (SNC) performed a review of all findings pertaining to the subject ITAAC and associated corrective actions. This review found there are no relevant ITAAC findings associated with this ITAAC. The ITAAC completion review is documented in the ITAAC Completion Package for ITAAC 2.5.02.06a.i (Reference 2) and is available for NRC review.

ITAAC Completion Statement

Based on the above information, SNC hereby notifies the NRC that ITAAC 2.5.02.06a.i was performed for VEGP Unit 4 and that the prescribed acceptance criteria were met.

Systems, structures, and components verified as part of this ITAAC are being maintained in their as-designed, ITAAC compliant condition in accordance with approved plant programs and procedures.

References (available for NRC inspection)

1. SV4-PMS-ITR-800529, Rev. 0, "Unit 4 Test Results of PMS Automatic Reactor Trip Testing: ITAAC 2.5.02.06a.i"
2. 2.5.02.06a.i-U4-CP-Rev0, ITAAC Completion Package

Attachment A
COL Appendix C Table 2.5.2-2

Table 2.5.2-2 PMS Automatic Reactor Trips
Source Range High Neutron Flux Reactor Trip Intermediate Range High Neutron Flux Reactor Trip Power Range High Neutron Flux (Low Setpoint) Trip Power Range High Neutron Flux (High Setpoint) Trip Power Range High Positive Flux Rate Trip Reactor Coolant Pump High-2 Bearing Water Temperature Trip Overtemperature Delta-T Trip Overpower Delta-T Trip Pressurizer Low-2 Pressure Trip Pressurizer High-2 Pressure Trip Pressurizer High-3 Water Level Trip Low-2 Reactor Coolant Flow Trip Low-2 Reactor Coolant Pump Speed Trip Low-2 Steam Generator Narrow Range Water Level Trip High-3 Steam Generator Water Level Trip Automatic or Manual Safeguards Actuation Trip Automatic or Manual Depressurization System Actuation Trip Automatic or Manual Core Makeup Tank (CMT) Injection Trip Passive Residual Heat Removal (PRHR) Actuation Reactor Trip